

# Interference Search

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	15	(slid\$3 and groove and shaft and (labyrinth or radial or circumferential) and injector). clm.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/05/16 09:09

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	15	(slid\$3 and groove and shaft and (labyrinth or radial or circumferential) and injector). clm.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/05/16 09:09
S1	350	239/96.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/01/31 09:07
S2	970	239/102.2.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/05/16 09:03
S3	10	S1 and S2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/08/23 12:49
S4	2	"6283389".pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/08/23 14:12
S5	11	("1737985"   "1964218"   "1990875"   "3398936"   "3425635"   "3581728").PN. OR ("6283389").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2005/08/23 14:16
S6	13	("3425635").URPN.	USPAT	OR	ON	2005/08/23 14:20
S7	310	251/355.ccls.	USPAT	OR	ON	2005/08/23 14:42
S8	11	grov\$3 adj piston	USPAT	OR	ON	2005/08/23 14:44
S9	339	grov\$3 same piston	USPAT	OR	ON	2005/08/23 14:44
S10	1	labyrinth adj grov\$3 same piston	USPAT	OR	ON	2005/08/23 14:54
S11	2	labyrinth adj grov\$3	USPAT	OR	ON	2005/08/23 14:46
S12	591	labyrinth same piston	USPAT	OR	ON	2005/08/23 14:52
S13	1209	labyrinth same grooves	USPAT	OR	ON	2005/08/23 14:52
S14	169	labyrinth adj grooves	USPAT	OR	ON	2005/08/23 14:52
S15	44	labyrinth adj groov\$3 same piston	USPAT	OR	ON	2005/08/23 14:57
S16	8	anular adj grooves	USPAT	OR	ON	2005/08/23 14:57
S17	17582	annular adj grooves	USPAT	OR	ON	2005/08/23 14:57
S18	2264	S17 same piston	USPAT	OR	ON	2005/08/23 15:17
S19	84	S18 same friction	USPAT	OR	ON	2005/08/23 15:22
S20	1349	S18 same end	USPAT	OR	ON	2005/08/23 15:23

## EAST Search History

S21	308	384/15.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/02/17 10:47
S22	223	384/16.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/08/30 10:54
S23	60	384/32.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/08/30 11:05
S24	764	277/412.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/08/30 11:11
S25	107	277/418.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/08/30 11:05
S26	25	("0017855"   "2878990"   "3422765"   "3731984"   "4304410"   "4389849"   "4627795").PN. OR ("4889039").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2005/08/30 11:21
S27	32	("0017855"   "1233438"   "1360498"   "1953171"   "2291243"   "2860896"   "2878990"   "3035879"   "3653303"   "3659504"   "3721163"   "3818805"   "4135723"   "4197786").PN. OR ("4304410").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2005/08/30 11:22
S28	11	("3721163" "4889039" "5140905" "628338 9" "6547534").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/01/31 09:04
S29	999	239/102.2.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/01/31 09:06
S30	359	239/96.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/05/16 08:58
S31	312	251/355.ccls.	USPAT	OR	ON	2006/01/31 09:08

## EAST Search History

S32	309	384/15.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/01/31 09:09
S33	223	384/16.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/01/31 09:09
S34	60	384/32.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/01/31 09:10
S35	107	277/418.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/01/31 09:10
S36	766	277/412.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/01/31 09:11
S37	0	("736367").URPN.	USPAT	OR	ON	2006/01/31 09:12
S38	0	("1024425").URPN.	USPAT	OR	ON	2006/01/31 09:12
S39	0	("2005/0178859").URPN.	USPAT	OR	ON	2006/01/31 09:12
S40	11	("1737985"   "1964218"   "1990875"   "3398936"   "3425635"   "3581728").PN. OR ("6283389").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/01/31 09:12
S41	11	("1749586"   "2891808"   "3292847").PN. OR ("3614112").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/01/31 09:14
S42	1	("1953172").URPN.	USPAT	OR	ON	2006/01/31 09:14
S43	21	("1336342"   "1379257"   "1492397"   "1951959"   "2077880"   "2197942"   "3106138").PN. OR ("3721163").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/01/31 09:15
S44	2	("1336342").URPN.	USPAT	OR	ON	2006/01/31 09:16
S45	4	("2197942").URPN.	USPAT	OR	ON	2006/01/31 09:16
S46	32	("0017855"   "1233438"   "1360498"   "1953171"   "2291243"   "2860896"   "2878990"   "3035879"   "3653303"   "3659504"   "3721163"   "3818805"   "4135723"   "4197786").PN. OR ("4304410").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/01/31 09:17
S47	16	("3364675"   "3777722"   "4245844"   "4304410"   "4474106"   "4545738"   "4623151"   "4644851"   "4802332").PN. OR ("5140905").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/01/31 09:19

## EAST Search History

S48	1000	239/102.2.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/02/09 10:08
S49	951	239/533.2.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/02/09 10:09
S50	873	239/533.2.ccls.	US-PGPUB; USPAT; EPO; JPO	OR	ON	2006/02/09 10:09
S51	10	("20020020394"   "20030019960"   "20030047619"   "20030052187"   "20040011887"   "4155535"   "5551398"   "6371438"   "6626372"   "6736331").PN. OR ("6802298").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/02/09 10:16
S52	14182	tetsuya Yoshimura .in.	US-PGPUB; USPAT; USOCR	OR	ON	2006/02/09 10:17
S53	0	"tetsuya Yoshimura" .in.	US-PGPUB; USPAT; USOCR	OR	ON	2006/02/09 10:17
S54	11281	tetsuya adjYoshimura.in.	US-PGPUB; USPAT; USOCR	OR	ON	2006/02/09 10:17
S55	0	tetsuya adj Yoshimura.in.	US-PGPUB; USPAT; USOCR	OR	ON	2006/02/09 10:19
S56	1	"6367453".pn.	US-PGPUB; USPAT; USOCR	OR	ON	2006/02/09 10:20
S57	671008	DENSO CORPORATION.as.	US-PGPUB; USPAT; USOCR	OR	ON	2006/02/09 10:20
S58	5453	"DENSO CORPORATION".as.	US-PGPUB; USPAT; USOCR	OR	ON	2006/02/09 10:21
S59	79880	injector	US-PGPUB; USPAT; USOCR	OR	ON	2006/02/09 10:21
S60	572	S59 and S58	US-PGPUB; USPAT; USOCR	OR	ON	2006/02/09 10:21
S61	80976	"high pressure" with "low pressure"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/02/09 10:33

## EAST Search History

S62	80976	(high adj pressure) with (low adj pressure)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/02/09 10:31
S63	9082	S62 with line	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/02/09 10:32
S64	516	S63 and fuel adj injector	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/02/09 10:32
S65	0	S64 and chaber	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/02/09 10:32
S66	429	S64 and chamber	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/02/09 10:32
S67	1009	"high pressure line" with "low pressure line"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/02/09 10:33
S68	2110608	chamber	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/02/09 10:34
S69	159	S68 with S67	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/02/09 10:34
S70	134115	injector	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/02/09 10:34
S71	17	S69 and S70	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/02/09 10:34
S72	14	("4997132"   "5819710").PN. OR ("6367453").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/02/09 10:41

## EAST Search History

S73	3	("6079641"   "6155532"   "6367453").PN. OR ("6817542").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/02/09 10:48
S74	590	123/467.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2006/02/09 10:48
S75	1003	239/102.2.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/02/17 10:47
S76	361	239/96.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/02/17 10:47
S77	312	251/355.ccls.	USPAT	OR	ON	2006/02/17 10:50
S78	223	384/16.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/02/17 10:47
S79	309	384/15.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/02/17 10:47
S80	60	384/32.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/02/17 10:51
S81	107	277/418.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/02/17 10:48
S82	767	277/412.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/02/17 10:48
S83	361	239/96.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/02/17 10:48
S84	312	251/355.ccls.	USPAT	OR	ON	2006/02/17 10:48
S85	956	239/533.2.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/02/17 10:50

## EAST Search History

S86	1003	239/102.2.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/02/17 10:49
S87	276	239/533.4.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/02/17 10:52
S88	589	239/533.9.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/02/17 10:52
S89	266	239/533.11.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/02/17 10:52
S90	1015	239/102.2.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/05/16 08:56
S91	312	251/355.ccls.	USPAT	OR	ON	2006/05/16 08:56
S92	309	384/15.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/05/16 08:56
S93	223	384/16.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/05/16 08:56
S94	60	384/32.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/05/16 08:56
S95	109	277/418.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/05/16 08:56
S96	769	277/412.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/05/16 08:56



## EAST Search History

S97	1015	239/102.2.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/05/16 08:57
S98	370	239/96.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/05/16 08:59
S99	223	384/16.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/05/16 08:57
S100	60	384/32.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/05/16 08:57
S101	109	277/418.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/05/16 08:57
S102	769	277/412.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/05/16 08:57
S103	1015	239/102.2.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/05/16 08:58
S104	370	239/96.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/05/16 08:58
S105	309	384/15.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/05/16 08:58
S106	223	384/16.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/05/16 08:58

## EAST Search History

S107	60	384/32.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/05/16 08:58
S108	109	277/418.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/05/16 08:58
S109	109	277/418.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/05/16 08:59
S110	769	277/412.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/05/16 08:59
S111	1345	(slide\$3 and groove and shaft and (labtrinth or radial or circumferential)).clm.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/05/16 09:05
S112	1	(slide\$3 and groove and shaft and (labtrinth or radial or circumferential)and (fuel near injector)).clm.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/05/16 09:06
S113	1	(slide\$3 and groove and shaft and (labyrinth or radial or circumferential)and (fuel near injector)).clm.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/05/16 09:07
S114	7	(slid\$3 and groove and shaft and (labyrinth or radial or circumferential)and (fuel near injector)).clm.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/05/16 09:07
S115	2	(slid\$3 and groove and shaft and labyrinth and injector).clm.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/05/16 09:08
S116	15	(slid\$3 and groove and shaft and (labyrinth or radial or circumferential) and injector).clm.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2006/05/16 09:08